

Fig. 1

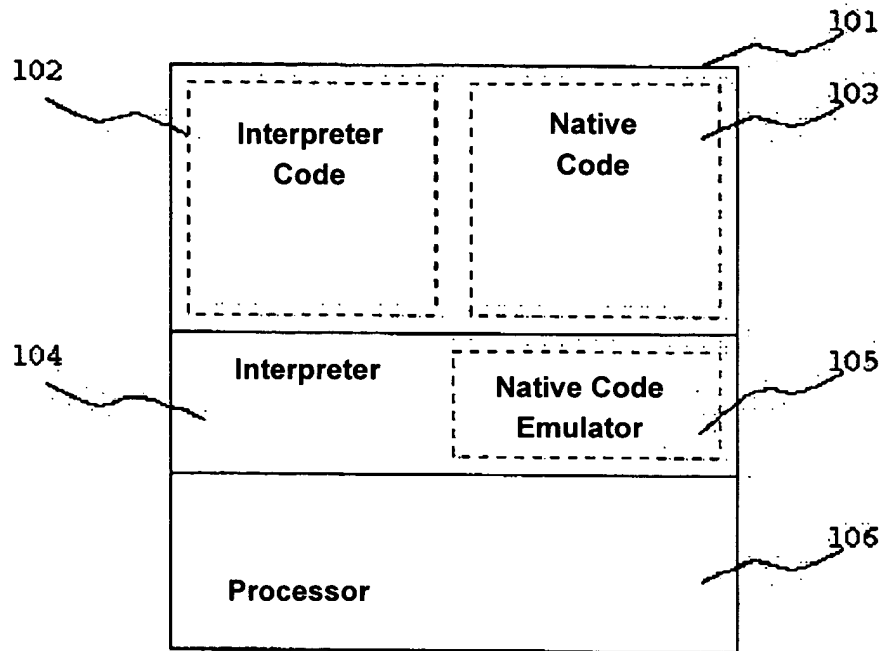


Fig. 2

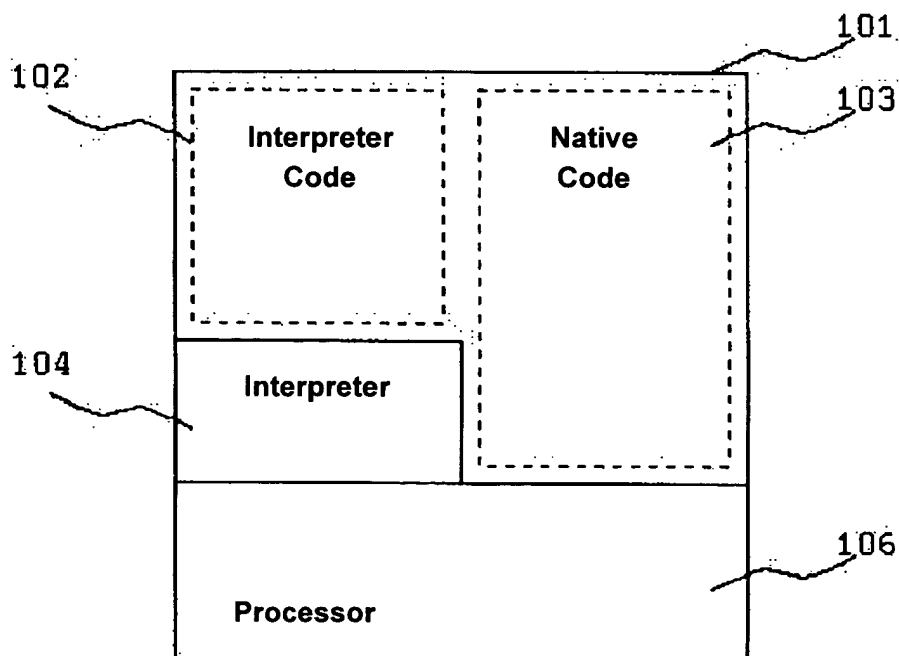


Fig. 3

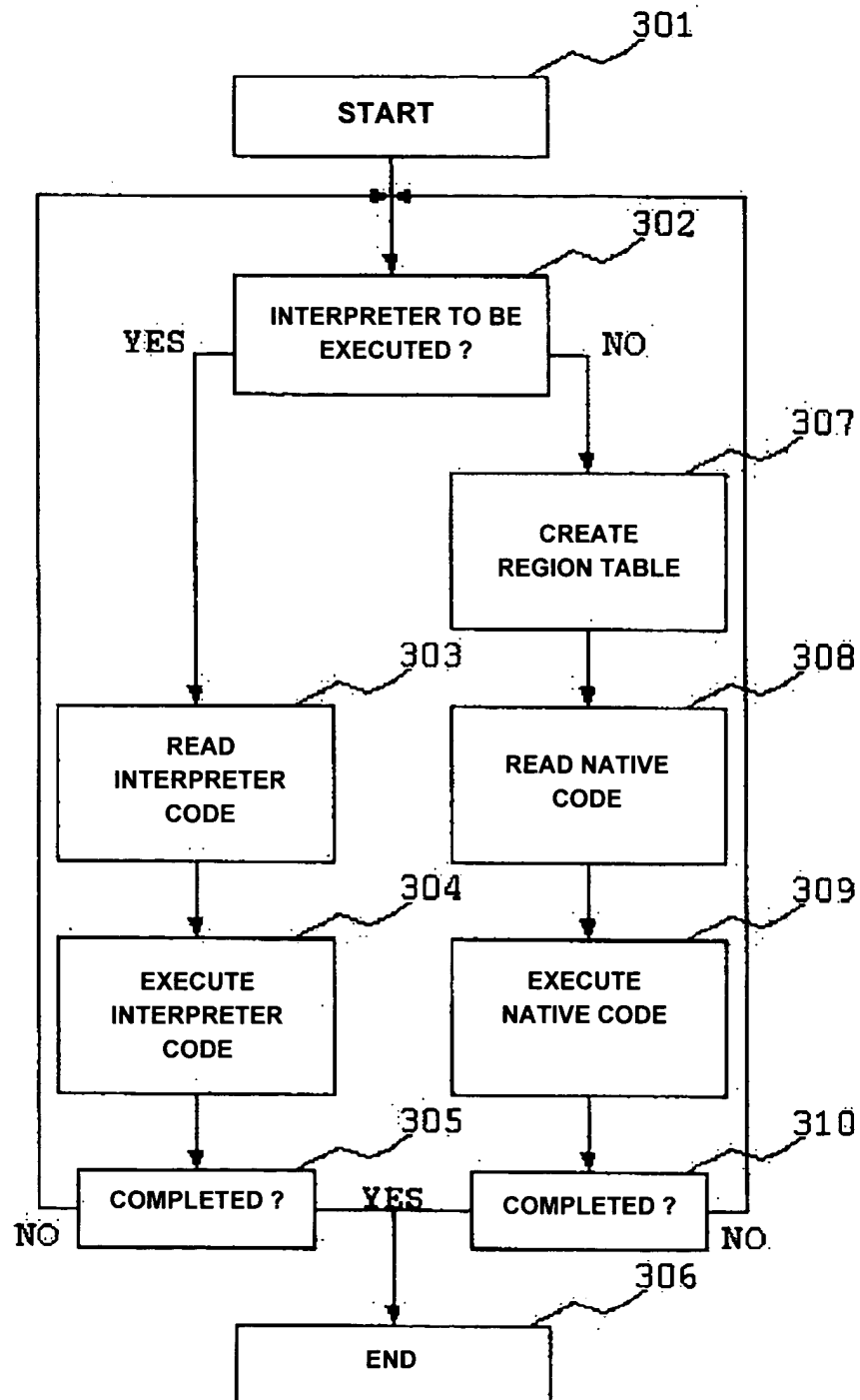


Fig. 4

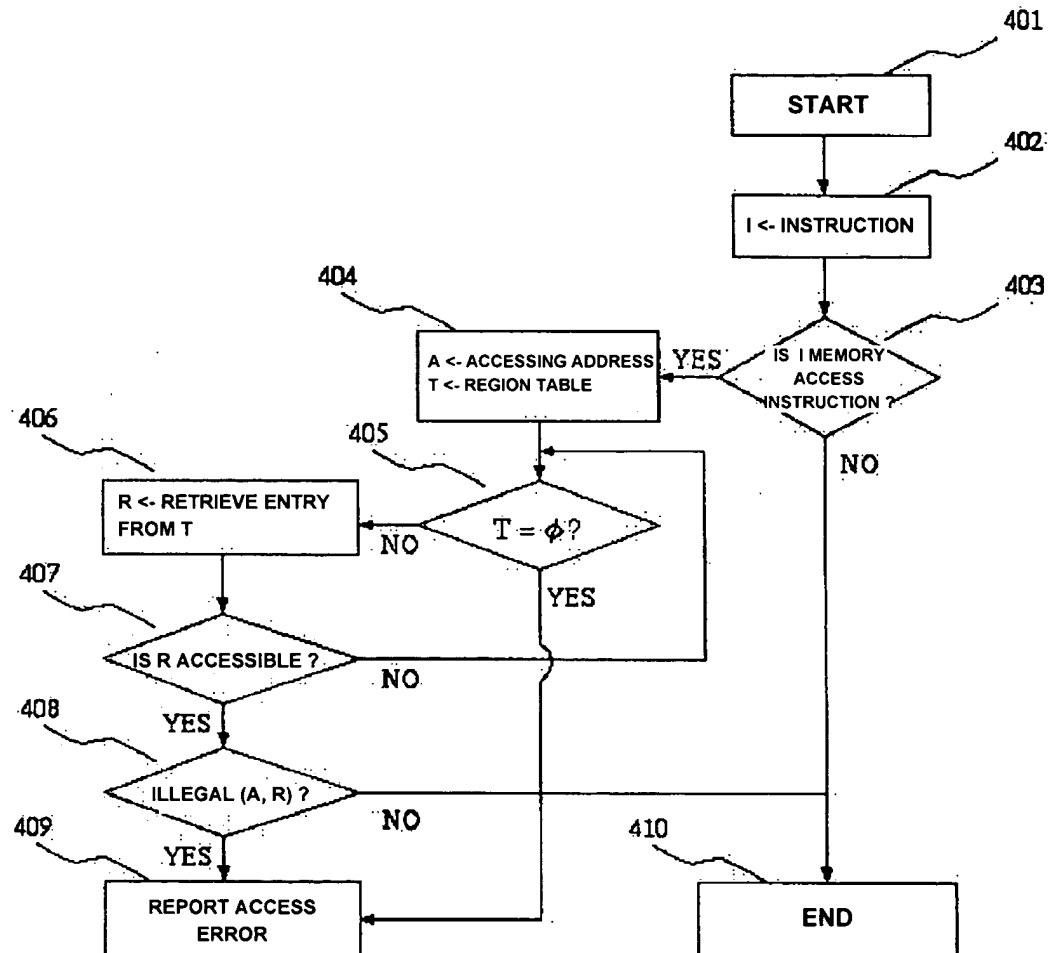


Fig. 5

00100000	001FFFFFF	rw	501	502	503	504
00200000	002FFFFFF	r-				505
00300000	003FFFFFF	--				506

Fig. 6 (a)

```

class C {
    static native void foo(Object obj);
    static void bar(Object obj) {
        foo(obj);
    }
}

```

(a) Java Code

Fig. 6 (b)

```

JNIEXPORT void JNICALL Java_C_foo(
    JNIEnv *env, jclass cls, jobject obj) {
    int *p = (int *)obj;
    *p = 0;
}

```

(b) Native Code

Fig. 7

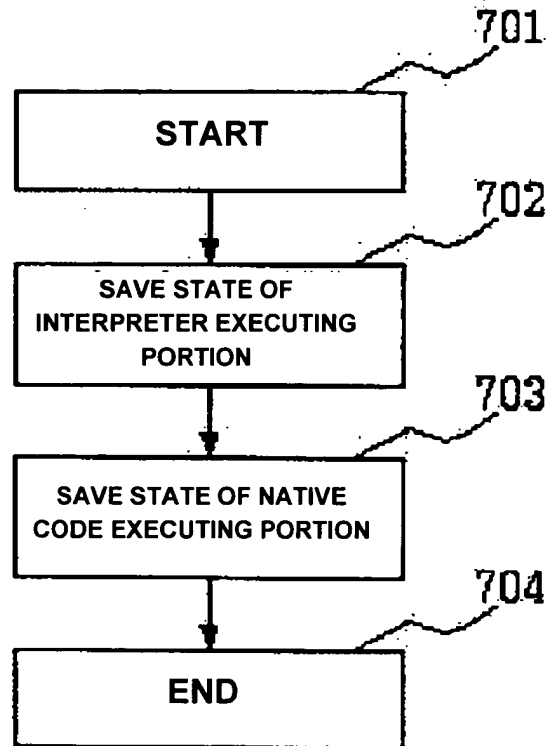


Fig. 8

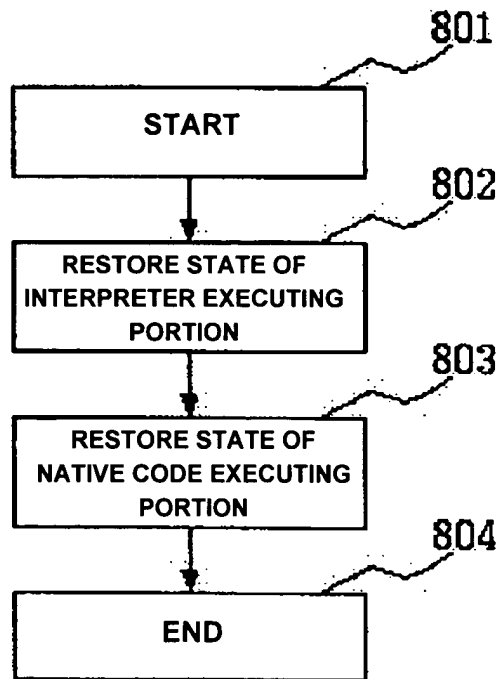


Fig. 9 (a)

```
class C {  
    static native void foo();  
    static void bar() {  
        for(int j=0; j < 10; j++) {  
            foo();  
        }  
    }  
}
```

(a) Java Code

Fig. 9 (b)

```
JNIEXPORT jint JNICALL Java_C_foo(  
    JNIEnv *env, jclass cls) {  
    jint s = 0;  
    for(int i = 0; i < 100; i++) {  
        s = s + 1;  
    }  
    return(s);  
}
```

(b) Native Code

Fig. 10

Interpreter

Variable	Value
j	3
PC	...

Native Code

Variable	Value
i	10
s	45
PC	...

Fig. 11

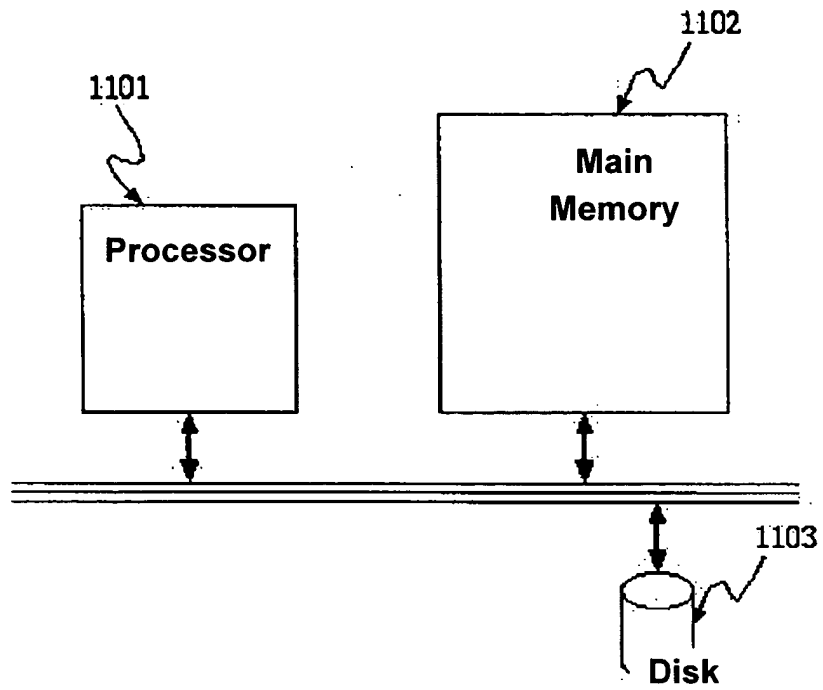


Fig. 12

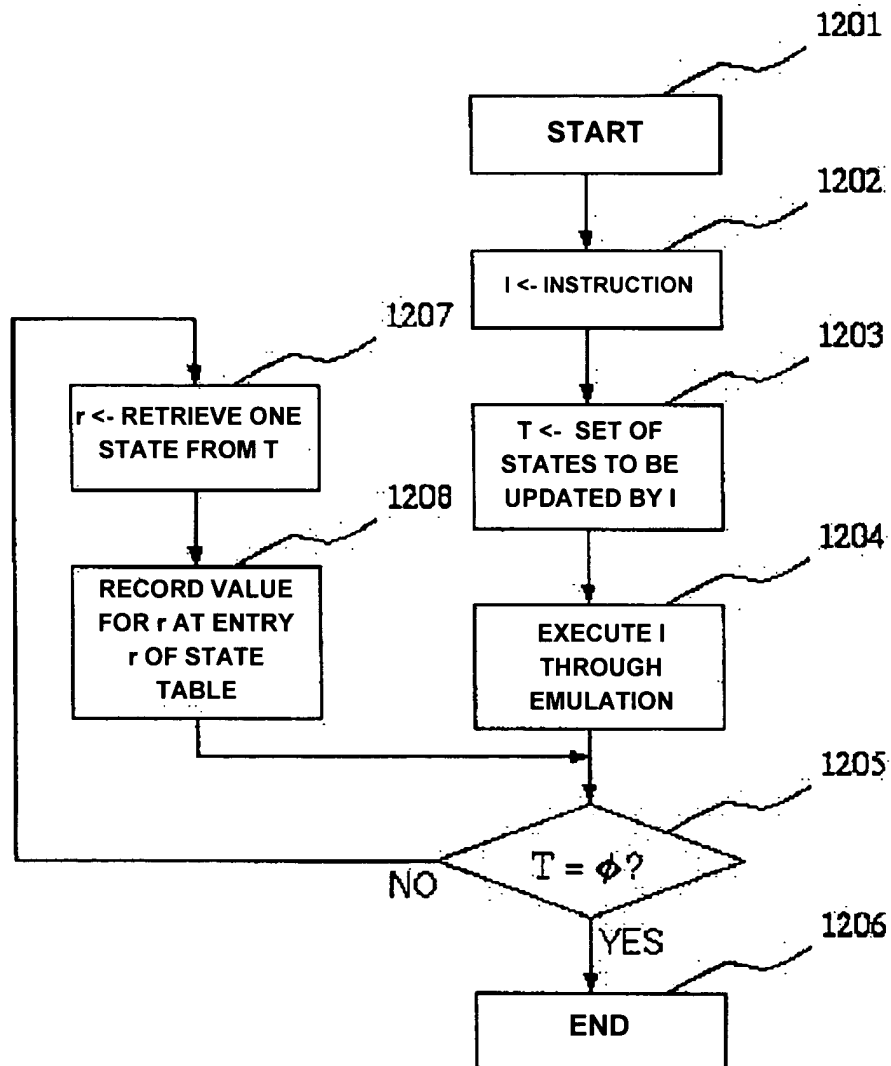


Fig. 13

